Edgewood Chemical Biological Center Patents

Issue Date	Patent Number	Title
07/29/03	6,599,733	Microbial Biodegradation of Phosphonates
07/15/03	6,594,000	Automatic Gain Control System for Use with Multiple Wavelength Signal Detector
07/08/03	6,590,375	Device and Method for Detection and/or Inspection of Conductive Particles Using High-Voltage Field
07/01/03	6,584,865	Absolute Reference Aerosol Sampler
05/20/03	6,566,138 B1	Chemical Agent Simulant Training
05/06/03	6,558,487 B1	Smoke Generating Compositions and Methods of Making the Same
05/06/03	6,558,946 B1	Automated Sample Processing for Identification if Microorganisms and Proteins
03/25/03	6,537,382 B1	Decontamination Methods for Toxic Chemical Agents
02/25/03	6,523,478 B1	Rifle-Launched Non-Lethal Cargo Dispenser
02/18/03	6,521,064 B1	Pyrotechnic Burster Composition
01/28/03	6,512,355 B1	Device and Method for Inspection and Detection oa a Material by Observing a High-Voltage Waveform Produced by that Material
10/22/02	6,469,145 B1	One-Step Purification Process for Organophosphorus Hydrolase Enzyme
10/15/02	6,464,392 B1	Tactical Thermal Luminescence Sensor for Ground Path Contamination Detection
09/10/02	6,448,016 B1	Nucleotide Sequences for Detection of Bacillus Anthracis
08/27/02	6,441,387 B1	Biological Aerosol Trigger (BAT)
08/06/02	6,428,122 B1	Portable Glovebox and Filtration System
07/16/02	6,420,181 B1	Field Microspot Test Method for On-Site Chemical Testing
07/02/02	6,412,416 B1	Propellant-Based Aerosol Generation Devices and Method
07/02/02	6,412,945 B1	Non-Uniform Mask Lens
06/11/02	6,403,329 B1	Methods of Detecting Methylphosphonic Compounds

05/14/02	6,389,408 B1	Neural Network Systems for Chemical and Biological Pattern Recognition via the Mueller Matrix
11/27/01	6,323,633 B1	Device and Method for Detection and/or Inspection of Conductive Particles Using High-voltage Field
07/24/2001	US 6,266,428 B1	System and Method for Remote Detection of Hazardous Vapors and Aerosols
06/12/2001	US 6,245,957 B1	Universal Decontaminating Solution for Chemical Warfare Agents
05/29/2001	US 6,238,866 B1	Detector for Nucleic Acid Typing and Methods of Using the Same
02/20/2001	US 6,191,696 B1	Alarm System for Hand-Held Chemical Monitor
01/23/2001	US 6,177,266 B1	Rapid Identification of Bacteria by Mass Spectrometry
01/23/2001	US 6,176,239 B1	Advanced Chemical-Biological Mask
01/16/2001	US 6,174,732 B1	Analytical Methodology for Qualitative and Quantitative Determination of Chemical Agent Vapor
01/09/2001	US 6,170,234 B1	Solid Particle Aerosol Belt and Dissemination Method
12/12/2000	6,158,429	Hood Respirator for Protection Against Biological Hazards
10/17/00	6,132,356	Protable System for Vapor, Aerosol or Airborne Hazard Suppression of Hazardous Environmental Spills
6/27/00	6,080,566	Enzymatic Detoxification of Organophosphorous Compunds
6/20/00	6,076,671	Solid Particle Aerosol Belt and Dissemination Method
5/9/00	6,060,710	Infrared Mueller Matrix Detection and Ranging System
4/25/00	6,054,310	Continuous Fed-Batch Degradation of Decontaminating Solution 2 (DS2)
4/18/00	6,051,189	System and Method for Detection, Identification and Monitoring of Submicron-Sized Particles
4/11/00	6,047,644	Propellant Based Aerosol Generating Device and Method of Use
1/25/00	6,017,750	Hydrolysis and Biodegradation of the Chemical Warfare Vesicant Agent HT
11/30/99	5,994,067	Method and Kit for Rapid Detction of Toxins and Bacteria
11/9/99	5,980,149	Sampling Arm coupler

10/26/99	5,973,464	Intermittent Automatic Windshield Wiper Controller
9/28/99	5,957,131	Biological Warfare Mask
8/17/99	5,939,229	Method for Determining Chemical Cross Talk or Isotopic Scrambling Induced by Analystical Procedures
8/10/99	5,935,862	MicroSpot Test Methods and Field Test Kit for On-Site Inspections of Chemical Agents
8/3/99	5,932,449	Detection of Botulinum Toxin
7/27/99	5,928,927	Enzymatic Detoxification of Organophosphorous Compounds
6/29/99	5,918,254	Low Concentration Aerosol Generator
1/26/99	5,864,767	Chemical Biological Explosive Containment System
1/5/99	5,856,616	Hand-held temperature programmable modular gas chromatograph
11/10/98	5,834,477	Opiate analgesic formulation with improved safety
9/29/98	5,813,278	Projectile grenade launching system tester
9/22/98	5,811,059	On-demand Ion Mobility Spectrometry Analysis of Gas Chromatograph effluents"
8/11/98	5,792,976	Rapidly deployable volume-displacement system for restraining movement of objects
6/9/98	5,763,737	S-(2-diisopropylamino) ethyl methylphosphonothioate ion with hydrogen peroxide
5/26/98	5,756,995	Ion interface for mass spectrometer
3/24/98	5,730,765	Super toxic analytical glove box system
3/17/98	5,728,927	Controlled multi-purpose chemical agent vapor generator system
2/17/98	5,719,323	Method of measuring the decomposition of a gaseous material under controlled temperature and time conditions
1/27/99	5,711,916	Air-transportable modular analytical laboratory
1/20/98	5,710,358	Oxidative detoxification of phosphonothiolates and phosphonothioic acids
1/13/98	5,708,503	Panoramic infrared imaging spectro-radiometer with reverse phase modulation beam broadcasting
12/30/97	5,703,276	One-window cell for testing passive remote vapor

		detectors
12/23/97	5,700,646	Comprehensive identification scheme for pathogens
12/16/97	5,698,812	Thermite destructive device
11/18/97	5,689,038	Decontamination of chemical warfare agents using activated aluminum oxide
10/28/97	5,682,010	Method for creating a one way visible screening smoke
10/14/97	5,678,243	Process for the in-situ detoxification of amino alkyl phosphonothiolates by hydrolysis
9/30/97	5,671,869	Fiber chaff disseminator
9/9/97	5,665,272	Multifuel combustion engine and use in generating obscurant smoke
8/26/97	5,660,173	Frustum layered canister
8/19/97	5,659,391	Earth monitoring satellite system with combined infrared interferometry and photo polarimetry for chemical and biological sensing
8/19/97	5,659,147	Method of assembly of compacted fibers and explosive charge for effective dissemination
8/5/97	5,654,144	Detection of Yersinia using the polymerase chain reaction
7/22/97	5,649,466	Method of rapidly deploying volume-displacement devices for restraining movement of objects
5/20/97	5,631,469	Neural network computing system for pattern recognition of thermoluminescence signature spectra and chemical defense
5/6/97	5,627,054	Competitor primer asymmetric polymerase chain reaction
2/25/97	5,606,111	Apparatus and method for measurement of off gassing rate
10/29/96	5,569,580	Method for testing the toxicity of chemicals using hyper activated spermatozoa
10/22/96	5,568,186	Focal plane filtered multi spectral multi detector imager
10/1/96	5,560,511	Hermetically sealable reusable container
9/24/96	5,559,284	Method for determining elongational viscosity and dynamic surface tension in liquid solutions
8/20/96	5,546,862	Remote control adaptor for a detonator system

8/13/96	5,544,586	Solid fuel ramjet tabular projectile
7/2/96	5,532,140	Method and apparatus for suspending micro particles
6/4/96	5,523,235	Apparatus for growing microorganism cultures
5/14/96	5,517,026	On-the-move surface sampling head for a mass spectrometer
12/26/95	5,478,377	Filter for a respiratory device
12/26/95	5,477,861	Respiratory test circuits and methods
6/13/95	5,424,741	Radiation detectable inflatable decoy
9/20/94	5,349,076	Methyl Bis(Trifluromethylthio)arsine
3/8/94	5,291,680	Grenade launching apparatus
3/4/94	5,298,707	Method for detection of micro-organisms
12/7/93	5,267,835	Pump speed controller - nuclear hardened/temperature responsive
10/19/93	5,255,125	Particulate obscurant disseminator air source
8/31/93	5,241,179	Thermoluminesence sensor for the remote detection of chemical agents and their stimulants
7/20/93	5,229,540	Tank alerting system
7/6/93	5,225,626	Azimuth determination method
1/26/93	5,181,506	Multi layer protective gas mask
12/8/92	5,169,777	Composition of biologically pure cultures of alcaligenes denitrificans and a porous carrier useful for Biodegradation
12/1/92	5,167,254	Absorber switching valve
9/29/92	5,151,526	4-[1-(Naphthalenyl)thl]-1H-Imidazole, method of making and using as an anesthetic
9/15/92	5,148,173	Millimeter wave screening cloud and method
9/15/92	5,146,642	Powered scrub brush
9/1/92	5,143,621	Method of chemical decontamination
6/16/92	5,122,298	Dispersible smoke, obscurant forming compositions
5/26/92	5,116,512	Method of chemical decontamination
5/26/92	5,115,633	Compact high energy auxiliary power method and means

4/21/92	5,106,983	Process of making carfentanil and related analgesics
3/24/92	5,098,488	Composition
3/17/92	5,097,212	Cell for measuring electrical conductivity and IO content of vapor
3/10/92	5,094,779	Method for measuring and testing the efficiency of gas mask filter using mono-dispersed aerosols
2/18/92	5,089,395	Viable micro-organism detection by induced fluorescence
2/11/92	5,087,389	Method of measuring the efficiency of gas mask filter using non-toxic mono-dispersed aerosol
1/14/92	5,080,829	Method of measuring the efficiency of gas mask filters, respirators and other personnel protective equipment
12/31/91	5,076,965	Method of generating mono-dispersed aerosols for nondestructive gas mask filter testing
12/24/91	5,074,215	Anti-fouling connector for electronically detonated munitions
12/10/91	5,071,497	Composition of use in flares
12/3/91	5,069,797	VX adsorption from a chloro-fluorocarbon solvent using a macro-reticular strong acid resin
11/26/91	5,067,406	Supersonic low-dram, solid fuel ramjet tubular projectile
10/29/91	5,061,854	Short scan passive infrared remote sensor
10/22/91	5,059,353	Method of testing the efficiency of gas mask filters using mono-dispersed aerosols
10/22/91	5,059,352	Methods for the generation of mono-dispersed aerosols for filter testing
10/22/91	5,059,351	Method of testing the efficiency of gas mask filters using mono-dispersed aerosols
10/22/91	5,059,350	Method of testing the efficiency of gas mask filters using poly-alpha olefin aerosol mixtures
10/22/91	5,059,349	Method of measuring the efficiency of gas mask filters using mono-dispersed aerosols
10/22/91	5,059,348	Method for measuring the efficiency of gas mask filters
10/1/91	5,052,618	Method and apparatus for protecting crops from frost by jet dispersed microencapsulated aerosols

9/24/91	5,050,501	Projected grenade simulator
7/16/91	5,032,380	Detection of sulfur mustards using spectrofluorometry
10/4/90	4,975,577	Method and instrument for mass analyzing samples with a quistor
10/23/90	4,965,202	Biodegradation of 1,4-Dibenz and related compounds
9/4/90	4,954,320	Reactive bed plasma air purification
6/12/90	4,933,669	Aerosol, vapor and liquid chemical agent detector with extending sensor plate
11/21/89	4,882,484	Method of mass analyzing a sample by us of a quistor
7/18/89	4,849,201	Process for preparing chlorinated lime
6/20/89	4,840,911	Use of sulfoxide for testing ionization detector system
6/30/87	4,676,880	Photolysis of lactones
11/18/86	4,622,852	Gas mask filters test apparatus using a breathing pump
6/17/86	4,595,003	Protective mask for airborne toxic substances
3/5/85	4,503,004	Method of molding a red phosphorus pyrotechnic composition